

=> fil reg  
 FILE 'REGISTRY' ENTERED AT 07:05:59 ON 02 OCT 2008  
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 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file  
 provided by InfoChem.

STRUCTURE FILE UPDATES: 1 OCT 2008 HIGHEST RN 1056151-32-6  
 DICTIONARY FILE UPDATES: 1 OCT 2008 HIGHEST RN 1056151-32-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

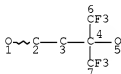
TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when  
 conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
 predicted properties as well as tags indicating availability of  
 experimental property data in the original document. For information  
 on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d sta que l28  
 L21 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE  
 L23 SCR 1838  
 L25 505 SEA FILE=REGISTRY SSS FUL L21 AND L23  
 L26 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 2

STEREO ATTRIBUTES: NONE

L28 153 SEA FILE=REGISTRY SUB=L25 SSS FUL L26

100.0% PROCESSED 198 ITERATIONS

153 ANSWERS

SEARCH TIME: 00.00.01

=> d ide can tot l42

L42 ANSWER 1 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1046135-47-0 REGISTRY

ED Entered STN: 03 Sep 2008

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (CA INDEX NAME)

MF (C15 H20 F6 O3 . C11 H18 O2 . C6 H7 F3 O2)x

CI PMS

PCT Polyacrylic

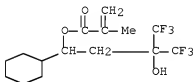
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

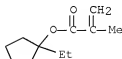
CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1

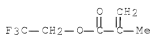
CMF C11 H18 O2



CM 3

CRN 352-87-4

CMF C6 H7 F3 O2



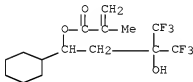
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:278849

L42 ANSWER 2 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 1046135-44-7 REGISTRY  
ED Entered STN: 03 Sep 2008  
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-methylcyclopentyl 2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (CA INDEX NAME)  
MF (C15 H20 F6 O3 . C10 H16 O2 . C6 H7 F3 O2)x  
CI PMS  
PCT Polyacrylic  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

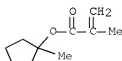
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CRN 913972-93-7  
CMF C15 H20 F6 O3



CM 2

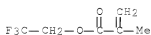
CRN 178889-45-7  
CMF C10 H16 O2



CM 3

CRN 352-87-4

CMF C6 H7 F3 O2



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:278849

L42 ANSWER 3 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1046135-43-6 REGISTRY

ED Entered STN: 03 Sep 2008

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-(1,1-dimethylethoxy)-2-oxoethyl 2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (CA INDEX NAME)

MF (C15 H20 F6 O3 . C10 H16 O4 . C6 H7 F3 O2)x

CI PMS

PCT Polyacrylic

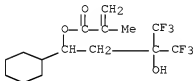
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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CRN 913972-93-7

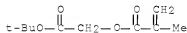
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CM 2

CRN 86024-98-8

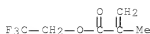
CMF C10 H16 O4



CM 3

CRN 352-87-4

CMF C6 H7 F3 O2



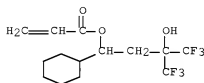
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:278849

L42 ANSWER 4 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 1031729-82-4 REGISTRY  
ED Entered STN: 30 Jun 2008  
CN 2-Propenoic acid, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-  
(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)  
MF (C14 H18 F6 O3)x  
CI PMS  
PCT Polyacrylic  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

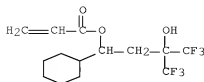
CRN 1031729-81-3  
CMF C14 H18 F6 O3



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:41651

L42 ANSWER 5 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 1031729-81-3 REGISTRY  
ED Entered STN: 30 Jun 2008  
CN 2-Propenoic acid, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-  
(trifluoromethyl)butyl ester (CA INDEX NAME)  
MF C14 H18 F6 O3  
CI COM  
SR CA

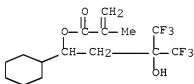


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L42 ANSWER 6 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 1022927-75-8 REGISTRY  
 ED Entered STN: 27 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-  
 (trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl  
 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C11 H18 O2}x  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

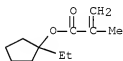
CM 1

CRN 913972-93-7  
 CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1  
 CMF C11 H18 O2



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

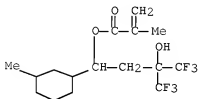
REFERENCE 1: 148:526564

L42 ANSWER 7 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 1018997-87-9 REGISTRY  
 ED Entered STN: 02 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-  
 (trifluoromethyl)propyl ester, polymer with 4,4,4-trifluoro-3-hydroxy-1-(3-  
 methylcyclohexyl)-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA  
 INDEX NAME)

MF {C16 H22 F6 O3 . C10 H12 F6 O3}x  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

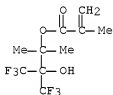
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CRN 1018997-86-8  
 CMF C16 H22 F6 O3



CM 2

CRN 944480-10-8  
 CMF C10 H12 F6 O3

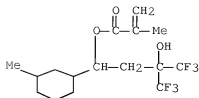


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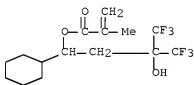
REFERENCE 1: 148:459591

L42 ANSWER 8 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 1018997-86-8 REGISTRY  
 ED Entered STN: 02 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 4,4,4-trifluoro-3-hydroxy-1-(3-methylcyclohexyl)-3-(trifluoromethyl)butyl ester (CA INDEX NAME)  
 MF C16 H22 F6 O3  
 CI COM  
 SR CA

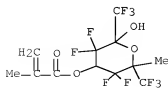


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L42 ANSWER 9 OF 36 REGISTRY COPYRIGHT 2008 ACS on SIN  
 RN 1018997-82-4 REGISTRY  
 ED Entered STN: 02 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,5,5-tetrafluorotetrahydro-2-hydroxy-6-methyl-2,6-bis(trifluoromethyl)-2H-pyran-4-yl  
 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C12 H10 F10 O4}x  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL  
 CM 1  
 CRN 913972-93-7  
 CMF C15 H20 F6 O3



CM 2  
 CRN 885121-70-0  
 CMF C12 H10 F10 O4





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

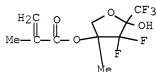
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:459591

L42 ANSWER 10 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 1018997-78-8 REGISTRY  
ED Entered STN: 02 May 2008  
CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 4,4-difluorotetrahydro-5-hydroxy-3-methyl-5-(trifluoromethyl)-3-furanyl 2-methyl-2-propenoate (CA INDEX NAME)  
MF {C16 H20 F6 O3 . C10 H11 F5 O4}x  
CI PMS  
PCT Polyacrylic  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

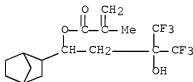
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CRN 872831-57-7  
CMF C10 H11 F5 O4



CM 2

CRN 863322-85-4  
CMF C16 H20 F6 O3



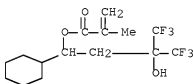
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

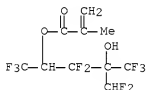
REFERENCE 1: 148:459591

L42 ANSWER 11 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1018997-74-4 REGISTRY  
 ED Entered STN: 02 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3-(difluoromethyl)-2,2,4,4,4-pentafluoro-3-hydroxy-1-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C10 H8 F10 O3}x  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL  
  
 CM 1  
  
 CRN 913972-93-7  
 CMF C15 H20 F6 O3



CM 2  
  
 CRN 852299-70-8  
 CMF C10 H8 F10 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

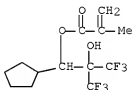
REFERENCE 1: 148:459591

L42 ANSWER 12 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 1018997-70-0 REGISTRY  
 ED Entered STN: 02 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-cyclopentyl-3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C13 H16 F6 O3}x  
 CI PMS

PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

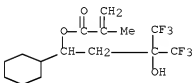
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CRN 944480-30-2  
 CMF C13 H16 F6 O3



CM 2

CRN 913972-93-7  
 CMF C15 H20 F6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

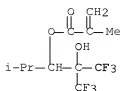
REFERENCE 1: 148:459591

L42 ANSWER 13 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 1018997-66-4 REGISTRY  
 ED Entered STN: 02 May 2008  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1-(1-methylethyl)-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C11 H14 F6 O3}2  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 944480-27-7

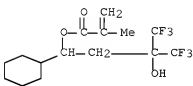
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CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:459591

L42 ANSWER 14 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1018678-94-8 REGISTRY

ED Entered STN: 01 May 2008

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2,2,3,3,4,4,5,5-octafluoropentyl 2-methyl-2-propenoate and 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

MF {C15 H20 F6 O3 . C16 H12 F6 O3 . C9 H8 F8 O2}x

CI PMS

PCT Polyacrylic

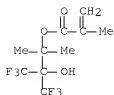
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 944480-10-8

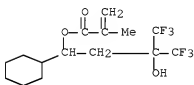
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CM 2

CRN 913972-93-7

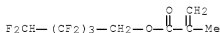
CMF C15 H20 F6 O3



CM 3

CRN 355-93-1

CMF C9 H8 F8 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:459639

L42 ANSWER 15 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1018678-93-7 REGISTRY

ED Entered STN: 01 May 2008

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

MF {C15 H20 F6 O3 . C10 H12 F6 O3}z

CI PMS

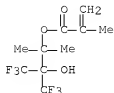
PCT Polyacrylic

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

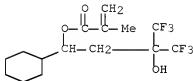
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CRN 944480-10-8  
CMF C10 H12 F6 O3



CM 2

CRN 913972-93-7  
CMF C15 H20 F6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:319378  
REFERENCE 2: 149:115617  
REFERENCE 3: 148:506633  
REFERENCE 4: 148:459639  
REFERENCE 5: 148:459591

L42 ANSWER 16 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 952584-82-6 REGISTRY

ED Entered STN: 07 Nov 2007

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

MF {C15 H22 O2 . C15 H20 F6 O3 . C7 H6 F6 O2}x

CI PMS

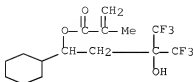
PCT Polyacrylic

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

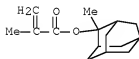
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CRN 913972-93-7  
CMF C15 H20 F6 O3



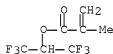
CM 2

CRN 177080-67-0  
CMF C15 H22 O2



CM 3

CRN 3063-94-3  
CMF C7 H6 F6 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:477565

L42 ANSWER 17 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 952584-81-5 REGISTRY

ED Entered STN: 07 Nov 2007

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

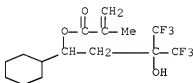
MF (C15 H20 F6 O3 . C11 H13 O2 . C7 H6 F6 O2);x

CI PMS

PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

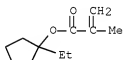
CM 1

CRN 913972-93-7  
 CMF C15 H20 F6 O3



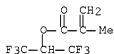
CM 2

CRN 266308-58-1  
 CMF C11 H18 O2



CM 3

CRN 3063-94-3  
 CMF C7 H6 F6 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:278849

REFERENCE 2: 147:477565

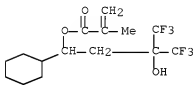
L42 ANSWER 18 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 952584-80-4 REGISTRY



ED Entered STN: 07 Nov 2007  
 CN 2-Propenoic acid, 2-methyl-, polymer with 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C4 H6 O2}x  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7  
 CME C15 H20 F6 O3



CM 2

CRN 79-41-4  
 CME C4 H6 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

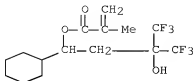
REFERENCE 1: 147:477565

L42 ANSWER 19 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 952584-79-1 REGISTRY  
 ED Entered STN: 07 Nov 2007  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-[(trifluoromethyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C15 H20 F6 O3 . C7 H10 F3 N O4 S}x  
 CI PMS  
 PCT Polyacrylic  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

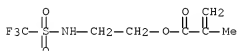
CMF C15 H20 F6 O3



CM 2

CRN 314756-98-4

CMF C7 H10 F3 N O4 S



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:477565

L42 ANSWER 20 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 952584-78-0 REGISTRY

ED Entered STN: 07 Nov 2007

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 4,4,4-trifluoro-3-hydroxy-1-methyl-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

MF (C15 H20 F6 O3 . C10 H12 F6 O3)x

CI PMS

PCT Polyacrylic

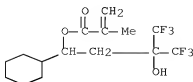
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

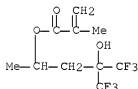
CMF C15 H20 F6 O3



CM 2

CRN 630414-85-6

CMF C10 H12 F6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:477565

L42 ANSWER 21 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 952584-77-9 REGISTRY

ED Entered STN: 07 Nov 2007

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl ester, polymer with 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

MF (C16 H16 F12 O4 . C15 H20 F6 O3)x

CI PMS

PCT Polyacrylic

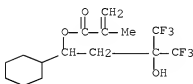
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

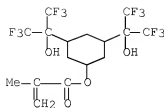
CMF C15 H20 F6 O3



CM 2

CRN 781637-36-3

CMF C16 H16 F12 O4



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:477565

L42 ANSWER 22 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 949158-55-8 REGISTRY

ED Entered STN: 04 Oct 2007

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-ethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate and 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-methyl-2-propenoate (CA INDEX NAME)

MF (C16 H24 O2 . C15 H20 F6 O3 . C14 H20 O3)x

CI PMS

PCT Polyacrylic

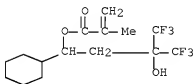
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

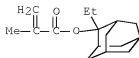
CMF C15 H20 F6 O3



CM 2

CRN 209982-56-9

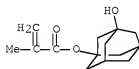
CMF C16 H24 O2



CM 3

CRN 115372-36-6

CMF C14 H20 O3



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:374517

L42 ANSWER 23 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 946843-89-6 REGISTRY

ED Entered STN: 13 Sep 2007

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

MF {C15 H20 F6 O3}x

CI PMS

PCT Polyacrylic

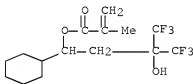
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)

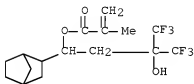
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 149:41651  
REFERENCE 2: 147:477565  
REFERENCE 3: 147:311271

L42 ANSWER 24 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 ED 942051-40-3 REGISTRY  
 RN Entered STN: 10 Jul 2007  
 CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-  
 hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3-  
 hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-methyl-2-propenoate,  
 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate and  
 tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (CA INDEX NAME)  
 MF {C16 H29 F6 O3 . C15 H22 O2 . C14 H20 O3 . C8 H10 O4}x  
 CI PMS  
 SR CA  
 LC STN Files: CA, CAPLUS

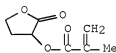
CM 1

CRN 863322-85-4  
CMF C16 H20 F6 O3



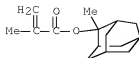
CM 2

CRN 195000-66-9  
CMF C8 H10 O4



CM 3

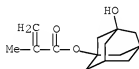
CRN 177080-67-0  
CMF C15 H22 O2



CM 4

CRN 115372-36-6

CMF C14 H20 O3



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:82701

L42 ANSWER 25 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 913972-96-0 REGISTRY

ED Entered STN: 27 Nov 2006

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

MF {C15 H20 F6 O3 . C15 H20 O6 . C11 H18 O2}x

CI PMS

PCT Polyacrylic

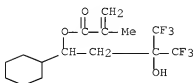
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3



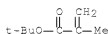
CM 2

CRN 266308-58-1





CRN 585-07-9  
CMF C8 H14 O2

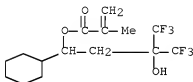


2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 148:526564

REFERENCE 2: 145:480438

L42 ANSWER 27 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 913972-93-7 REGISTRY  
ED Entered STN: 27 Nov 2006  
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester (CA INDEX NAME)  
MF C15 H20 F6 O3  
CI COM  
SR CA

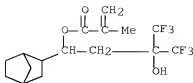


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L42 ANSWER 28 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 867260-79-5 REGISTRY  
ED Entered STN: 11 Nov 2005  
CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)  
MF {C16 H20 F6 O3 . C16 H16 F12 O4}x  
CI PMS  
PCT Polyacrylic  
SR CA  
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

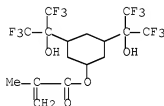
CRN 863322-85-4  
CMF C16 H20 F6 O3



CM 2

CRN 781637-36-3

CMF C16 H16 F12 O4



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:413506

L42 ANSWER 29 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 863322-93-4 REGISTRY

ED Entered STN: 16 Sep 2005

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-ethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 2-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

MF (C16 H24 O2 . C16 H20 F6 O3 . C13 H16 F6 O3 . C12 H14 O4)x

CI PMS

PCT Polyacrylic

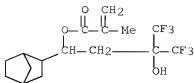
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 863322-85-4

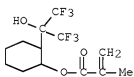
CMF C16 H20 F6 O3



CM 2

CRN 861840-88-2

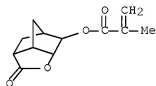
CMF C13 H16 F6 O3



CM 3

CRN 254900-07-7

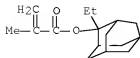
CMF C12 H14 O4



CM 4

CRN 209982-56-9

CMF C16 H24 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

## 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:257067

L42 ANSWER 30 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 863322-92-3 REGISTRY

ED Entered STN: 16 Sep 2005

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate and 2-ethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

MF (C16 H24 O2 . C16 H20 F6 O3 . C16 H16 F12 O4)x

CI PMS

PCT Polyacrylic

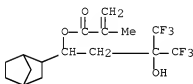
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 863322-85-4

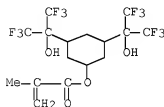
CMF C16 H20 F6 O3



CM 2

CRN 781637-36-3

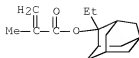
CMF C16 H16 F12 O4



CM 3

CRN 209982-56-9

CMF C16 H24 O2

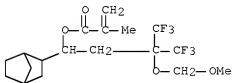


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:257067

L42 ANSWER 31 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 863322-91-2 REGISTRY  
ED Entered STN: 16 Sep 2005  
CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-(methoxymethoxy)-3-(trifluoromethyl)butyl ester, homopolymer (9CI) (CA INDEX NAME)  
MF (C18 H24 F6 O4)x  
CI FMS  
PCT Polyacrylic  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL  
  
CM 1  
  
CRN 863322-90-1  
CMF C18 H24 F6 O4



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:257067

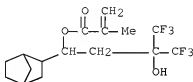
L42 ANSWER 32 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 863322-90-1 REGISTRY  
ED Entered STN: 16 Sep 2005  
CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)  
MF (C18 H24 F6 O4)x  
CI FMS  
PCT Polyacrylic  
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 863322-85-4

CMF C16 H20 F6 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:477565

REFERENCE 2: 147:311271

REFERENCE 3: 143:257067

L42 ANSWER 33 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN

RN 863322-88-7 REGISTRY

ED Entered STN: 16 Sep 2005

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-methyltricyclo[3.3.1.3,7]dec-2-yl 2-methyl-2-propenoate (CA INDEX NAME)

MF (C16 H20 F6 O3 . C15 H22 O2)x

CI PMS

PCT Polyacrylic

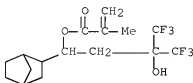
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

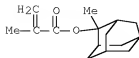
CRN 863322-85-4

CMF C16 H20 F6 O3



CM 2

CRN 177080-67-0  
 CMF C15 H22 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

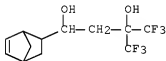
REFERENCE 1: 147:82701

REFERENCE 2: 143:257067

L42 ANSWER 34 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 863322-87-6 REGISTRY  
 ED Entered STN: 16 Sep 2005  
 CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer  
 with 1-bicyclo[2.2.1]hept-5-en-2-yl-4,4,4-trifluoro-3-(trifluoromethyl)-  
 1,3-butanediol (9CI) (CA INDEX NAME)  
 MF (C12 H14 F6 O2 . C8 H11 F3 O2)x  
 CI PMS  
 PCT Polyacrylic, Polyether, Polyvinyl  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

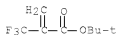
CM 1

CRN 863322-82-1  
 CMF C12 H14 F6 O2



CM 2

CRN 105935-24-8  
 CMF C8 H11 F3 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

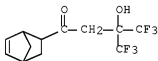
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:257067

L42 ANSWER 35 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 863322-86-5 REGISTRY  
ED Entered STN: 16 Sep 2005  
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer  
with 1-bicyclo[2.2.1]hept-5-en-2-yl-4,4,4-trifluoro-3-hydroxy-3-  
(trifluoromethyl)-1-butanone (9CI) (CA INDEX NAME)  
MF (C12 H12 F6 O2 . C8 H11 F3 O2)x  
CI PMS  
PCT Polyacrylic, Polyether, Polyvinyl  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

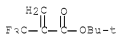
CM 1

CRN 863322-81-0  
CMF C12 H12 F6 O2



CM 2

CRN 105935-24-8  
CMF C8 H11 F3 O2



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

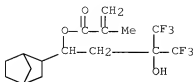
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:257067

L42 ANSWER 36 OF 36 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 863322-85-4 REGISTRY  
ED Entered STN: 16 Sep 2005  
CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-  
hydroxy-3-(trifluoromethyl)butyl ester (CA INDEX NAME)  
MF C16 H20 F6 O3  
CI COM



SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:257067

=> fil hcaplus  
FILE 'HCAPLUS' ENTERED AT 07:06:23 ON 02 OCT 2008  
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FILE COVERS 1907 - 2 Oct 2008 VOL 149 ISS 14  
FILE LAST UPDATED: 1 Oct 2008 (20081001/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> => d 147 bib abs hitstr retable tot

L47 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:1130912 HCAPLUS Full-text  
DN 143:413506  
TI Top coat composition for photoresist containing fluoroalcohol group-bearing polymer  
IN Maeda, Kazuhiko; Komoriya, Haruhiko; Sumida, Shinichi; Miyazawa, Satoru; Michitaka, Ootani

PA Central Glass Company, Limited, Japan  
 SO PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005098541	A1	20051020	WO 2005-JP5113	20050322 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RN: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005316352	A	20051110	JP 2004-201439	20040708 <--
	US 20050250898	A1	20051110	US 2004-980769	20041104 <--
	US 7402626	B2	20080722		
	EP 1720067	A1	20061108	EP 2005-727061	20050322 <--
	R: DE, FR, GB				
	KR 2007007093	A	20070112	KR 2006-717757	20060901 <--
	KR 800397	B1	20080201		
PRAI	JP 2004-104885	A	20040331	<--	
	JP 2004-201439	A	20040708	<--	
	WO 2005-JP5113	W	20050322		
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB A top coat composition, characterized in that a polymer containing at least one structure represented by the formula I-III (R1 = H, F, etc.; R2 = O, COO, etc.; R3 = CH, OH, etc.; R4 = Me, trifluoromethyl, etc.; R5 = H, protective group; n = 1, 2; m = 0, 1; and R6 = alicyclic group, Ph) is used and is applied on the upper surface of a photoresist; and a top coat composition solution which is prepared by dissolving the top coat composition in an organic solvent. The top coat composition and the top coat composition solution can be suitably used for immersion lithog.

IT 867260-79-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(Top coat composition for photoresist containing fluoroalc. group-bearing polymer)

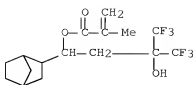
RN 867260-79-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 863322-85-4

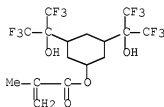
CMF C16 H20 F6 O3



CM 2

CRN 781637-36-3

CMF C16 H16 F12 O4



## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Central Glass Co Ltd	2003			JP 200340840 A	
Central Glass Co Ltd	2003			US 200378352 A1	
Central Glass Co Ltd	2004			US 2004106755 A1	HCAPLUS
Central Glass Co Ltd	2004			JP 200483900 A	
Central Glass Co Ltd	2005			JP 200529539 A	
Central Glass Co Ltd	2005			WO 20055370 A1	
Daikin Industries Ltd	2002			EP 1375540 A1	HCAPLUS
Daikin Industries Ltd	2002			WO 200266526 A1	
Daikin Industries Ltd	2002			US 20042575 A1	
Mitsubishi Chemical Cor	1996			JP 08-305024 A	HCAPLUS
Mitsubishi Chemical Cor	1997			JP 09-325500 A	HCAPLUS
Mitsuru, S	2005			<a href="http://www.sematech.">http://www.sematech.</a>	

L47 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:962187 HCAPLUS [Full-text](#)

DN 143:257067

TI Fluorine-containing cyclic compound, fluorine-containing polymer compound,  
resist material using same and method for forming patternIN Komoriya, Haruhiko; Sumida, Shinichi; Ootani,  
Mitsutaka; Komata, Takeo; Maeda, Kazuhiko

PA Central Glass Company, Limited, Japan

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI WO 2005080306 A1 20050901 WO 2005-JP2400 20050217 <--  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 JP 2005232095 A 20050902 JP 2004-44142 20040220 <--  
 JP 4079893 B2 20080423  
 KR 849126 B1 20080730 KR 2006-717600 20060831 <--  
 US 20080003517 A1 20080103 US 2007-589807 20070515 <--  
 PRAI JP 2004-44142 A 20040220 <--  
 WO 2005-JP2400 W 20050217 <--

OS MARPAT 143:257067

AB Disclosed is a fluorine-containing cyclic compound represented by R1-CO-C(R2)(R3)-C(CF3)2OH [R1 = C1-25-cycloalkyl, cycloalkenyl, cycloalkynyl; R2, R3 = H, halo, C1-25-cycloalkyl]. A fluorine-containing polymer composition and a chemical amplified resist composition suitable for semiconductor device fabrication are also claimed.

IT 863322-85-4P

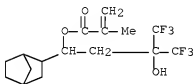
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(fluorine-containing cyclic compound preparation; fluorine-containing cyclic compound,

fluorine-containing polymer compound, resist material using same and method for forming pattern)

RN 863322-85-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester (CA INDEX NAME)



IT 863322-86-5P 863322-87-6P 863322-88-7P  
 863322-89-8P 863322-91-2P 863322-92-3P  
 863322-93-4P

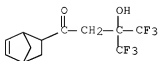
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(fluorine-containing polymer compound for chemical amplified resist composition)

RN 863322-86-5 HCAPLUS

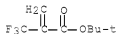
CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1-bicyclo[2.2.1]hept-5-en-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)-1-butanone (9CI) (CA INDEX NAME)

CRN 863322-81-0  
CMF C12 H12 F6 O2



CM 2

CRN 105935-24-8  
CMF C8 H11 F3 O2

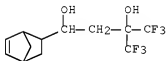


RN 863322-87-6 HCAPLUS

CN 2-Propenoic acid, 2-(trifluoromethyl)-, 1,1-dimethylethyl ester, polymer with 1-bicyclo[2.2.1]hept-5-en-2-yl-4,4,4-trifluoro-3-(trifluoromethyl)-1,3-butanediol (9CI) (CA INDEX NAME)

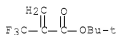
CM 1

CRN 863322-82-1  
CMF C12 H14 F6 O2



CM 2

CRN 105935-24-8  
CMF C8 H11 F3 O2



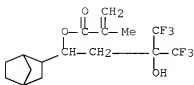
RN 863322-88-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-methyltricyclo[3.3.1.1.3,7]dec-2-yl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 863322-85-4

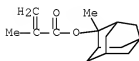
CMF C16 H20 F6 O3



CM 2

CRN 177080-67-0

CMF C15 H22 O2



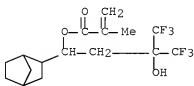
RN 863322-89-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 863322-85-4

CMF C16 H20 F6 O3



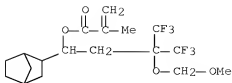
RN 863322-91-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-(methoxymethoxy)-3-(trifluoromethyl)butyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 863322-90-1

CMF C18 H24 F6 O4



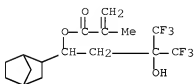
RN 863322-92-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate and 2-ethyltricyclo[3.3.1.1.3,7]dec-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 863322-85-4

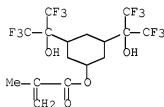
CMF C16 H20 F6 O3



CM 2

CRN 781637-36-3

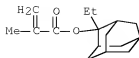
CMF C16 H16 F12 O4



CM 3

CRN 209982-56-9

CMF C16 H24 O2



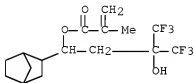
RN 863322-93-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-ethyltricyclo[3.3.1.1.3,7]dec-2-yl 2-methyl-2-propenoate, hexahydro-2-oxo-3,5-methano-2H-cyclopenta[b]furan-6-yl 2-methyl-2-propenoate and 2-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 863322-85-4

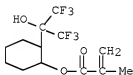
CMF C16 H20 F6 O3



CM 2

CRN 861840-88-2

CMF C13 H16 F6 O3

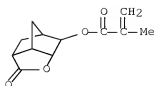


CM 3

CRN 254900-07-7

CMF C12 H14 O4

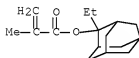




CM 4

CRN 209982-56-9

CMF C16 H24 O2



## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Burger, K	1992	334	219	Journal fuer Praktis	HCAPLUS
Central Glass Co Ltd	2003			US 2003232940 A1	HCAPLUS
Central Glass Co Ltd	2003			JP 2003238620 A	HCAPLUS
Fuji Photo Film Co Ltd	2004			EP 1341038 A2	HCAPLUS
Fuji Photo Film Co Ltd	2004			EP 1367440 A2	HCAPLUS
Fuji Photo Film Co Ltd	2004			US 2004175645 A1	HCAPLUS
Fuji Photo Film Co Ltd	2004			JP 20044226 A	
Fuji Photo Film Co Ltd	2004			JP 20044576 A	
Fuji Photo Film Co Ltd	2004			US 20045512 A1	
International Business	2004			US 2003224283 A1	
International Business	2004			JP 200446098 A	

=&gt; d 148 bib abs hitstr retable tot

L48 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:1070150 HCAPLUS Full-text

DN 149:319378

TI Chemically amplified positive photoresist materials and their patterning while inhibiting interlayer mixing

IN Hatakeyama, Jun; Harada, Yuji

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 88pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2008203452	A	20080904	JP 2007-38338	20070219
PRAI	JP 2007-38338		20070219		

AB The materials contain (i) base resins increasing alkali solubility by acid attack and (ii) macromol. additives having (hydroxy- and/or carboxy)styrene-derived repeating unit and fluorine-containing repeating unit. The base resins may have acid-labile group-containing unit and hydroxy- and/or lactone ring-containing unit. Films of the above materials, forming antireflective films containing light-absorbing layers comprised of the said macromol. additives, and optionally protective films containing  $\alpha$ -trifluoromethylhydroxy-containing macromols., are also claimed. Patterning the resist materials and/or their films, by liquid immersion lithog. (at exposure wavelength 180-250 nm), is further claimed.

IT 1018678-93-7

RL: TEM (Technical or engineered material use); USES (Uses)  
(topcoat layers; pos. photoresists containing phenolic group-containing fluorine polymer surfactants to inhibit interlayer mixing)

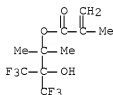
RN 1018678-93-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-10-8

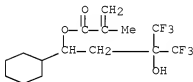
CMF C10 H12 F6 O3



CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



L48 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:980236 HCAPLUS [Full-text](#)

DN 149:278849

TI Self-topcoating photoresist for photolithography

IN Allen, Robert; Brock, Phillip; Kusumoto, Shiro; Nishimura, Yukio; Sanders, Daniel P.; Slezak, Mark Steven; Sooriyakumaran, Ratnam; Sundberg, Linda K.; Truong, Hoa; Wallraff, Gregory M.

PA USA

SO U.S. Pat. Appl. Publ., 22pp., Cont.-in-part of U.S. Ser. No. 865,115.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20080193879	A1	20080814	US 2008-23108	20080131
	US 20070254235	A1	20071101	US 2006-380731	20060428
	US 20070254236	A1	20071101	US 2006-380744	20060428
	US 20070254237	A1	20071101	US 2006-380782	20060428
PRAI	US 2006-380731	A2	20060428		
	US 2006-380744	A2	20060428		
	US 2006-380782	A2	20060428		
	US 2007-865115	B2	20071001		

AB Photoresist additive polymers and photoresist formulations that can be used in immersion lithog. without the use of an addnl. topcoat are described. The resist comps. include a photoresist polymer, at least one photoacid generator, a solvent and a photoresist additive polymer from an acrylic polymer. The photoresist additive polymers are soluble in the photoresist formulation, have a high surface activity, do not alter the dissoln. of the photoresist, have the ability to block or reduce photoresist component leaching, exhibit a receding water contact angle of greater than about 55° and preferably greater than about 65°, exhibit an advancing water contact angle of less than about 95° and preferably less than about 90° and are hydrophobic in acidic aqueous solns. and hydrophilic in basic aqueous solns. Also a method of forming using these photoresist formulations including photoresist additive polymers to form photolithog. images is described.

IT 952584-81-5P 1046135-43-6P 1046135-44-7P  
 1046135-47-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(self-topcoating photoresist comps. containing additive acrylic polymers for immersion lithog.)

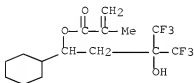
RN 952584-81-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

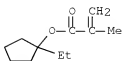
CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1

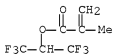
CMF C11 H18 O2



CM 3

CRN 3063-94-3

CMF C7 H6 F6 O2



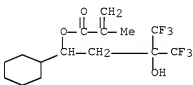
RN 1046135-43-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-(1,1-dimethylethoxy)-2-oxoethyl 2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

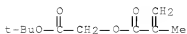
CMF C15 H20 F6 O3



CM 2

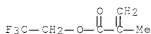
CRN 86024-98-8

CMF C10 H16 O4



CM 3

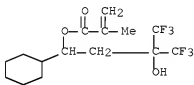
CRN 352-87-4  
CMF C6 H7 F3 O2



RN 1046135-44-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-methylcyclopentyl 2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (CA INDEX NAME)

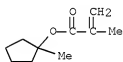
CM 1

CRN 913972-93-7  
CMF C15 H20 F6 O3



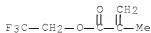
CM 2

CRN 178889-45-7  
CMF C10 H16 O2



CM 3

CRN 352-87-4  
CMF C6 H7 F3 O2



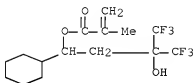
RN 1046135-47-0 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-

(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl  
2-methyl-2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate (CA  
INDEX NAME)

CM 1

CRN 913972-93-7

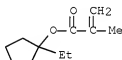
CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1

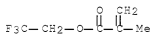
CMF C11 H18 O2



CM 3

CRN 352-87-4

CMF C6 H7 F3 O2



L48 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:796567 HCAPLUS [Full-text](#)

DN 149:115617

TI Photoresist pattern formation method by immersion photolithography

IN Hatakeyama, Jun

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 67pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

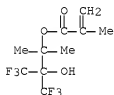
KIND

DATE

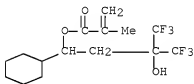
APPLICATION NO.

DATE

PI JP 2008152103 A 20080703 JP 2006-341248 20061219  
 PRAI JP 2006-341248 20061219  
 AB The method involves applying photoresists on substrates, heat-treating them, applying protective film materials on them (optional), exposing them with light of 180-250 nm via liqs. of refractive index  $\geq 1.4$  between wafers and projection lenses, developing them after heat treatment, and rinsing them with pure water containing 0.1-50% C1-4 alcs., thus reducing contact angle on resist film substrates and preventing blob defects and hole pattern clogging.  
 IT 1018678-93-7  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (protective film; photoresist pattern formation without blob defects or hole clogging by immersion photolithog. using C1-4 alc.-containing rinses)  
 RN 1018678-93-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)  
 CM 1  
 CRN 944480-10-8  
 CMF C10 H12 F6 O3



CM 2  
 CRN 913972-93-7  
 CMF C15 H20 F6 O3



L48 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2008:705776 HCAPLUS [Full-text](#)  
 DN 149:41651  
 TI Positive resist composition for liquid immersion exposure and method of forming resist pattern  
 IN Utsumi, Yoshiyuki; Yoshii, Yasuhiro; Nakamura, Tsuyoshi; Irie, Makiko  
 PA Tokyo Ohka Kogyo Co., Ltd., Japan  
 SO PCT Int. Appl., 91pp.  
 CODEN: PIXXD2  
 DT Patent

LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008068971	A1	20080612	WO 2007-JP70749	20071024
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2008145667 A 20080626 JP 2006-331780 20061208 PRAI JP 2006-331780 A 20061208				

AB The pos. resist composition comprises (A) resin component whose alkali solubility is increased by the action of an acid; (B) acid generator component capable of generating an acid when exposed to light; and (C) resin component containing a fluorine atom but not having any acid dissociative group, wherein the resin component (A) contains a resin having a constituent unit derived from acrylic acid but not containing a fluorine atom; and the resin component (C) contains (C1) noncircular-principal-chain resin and (C2) circular-principal-chain resin. The pos. resist composition can form a resist film having a high surface hydrophobicity and excelling in lithog. performance.

IT 946843-89-6 1031729-82-4

RL: TEM (Technical or engineered material use); USES (Uses)  
(pos. photoresist compns. for liquid immersion exposure)

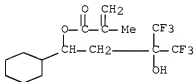
RN 946843-89-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3



RN 1031729-82-4 HCAPLUS

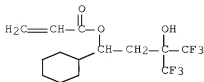
CN 2-Propenoic acid, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 1031729-81-3

CMF C14 H18 F6 O3





## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Central Glass Co Ltd	2005			EP 1489467 A1	
Central Glass Co Ltd	2005			US 20050013628 A1	
Central Glass Co Ltd	2005			WO 2005080306 A1	HCAPLUS
Central Glass Co Ltd	2005			JP 2005232095 A	HCAPLUS
Central Glass Co Ltd	2005			JP 2005316352 A	HCAPLUS
Fuji Photo Film Co Ltd	2006			EP 1621927 A2	HCAPLUS
Fuji Photo Film Co Ltd	2006			EP 1645908 A1	HCAPLUS
Fuji Photo Film Co Ltd	2006			US 20060008736 A1	HCAPLUS
Fuji Photo Film Co Ltd	2006			US 20060078823 A1	
Fuji Photo Film Co Ltd	2006			JP 2006133712 A	HCAPLUS
Fuji Photo Film Co Ltd	2006			JP 200648029 A	
Fuji Photo Film Co Ltd	2007			JP 200765024 A	
Promerus L L C	2006			US 20060234164 A1	HCAPLUS
Promerus L L C	2006			US 20060235174 A1	HCAPLUS
Promerus L L C	2006			WO 2006091523 A2	HCAPLUS
Promerus L L C	2006			WO 2006091802 A2	HCAPLUS
Promerus L L C	2006			JP 2006291177 A	HCAPLUS
Tokyo Ohka Kogyo Co Ltd	2007			WO 2007094192 A1	HCAPLUS
Tokyo Ohka Kogyo Co Ltd	2007			JP 2007249152 A	HCAPLUS

L48 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2008 ACS on SIN

AN 2008:546928 HCAPLUS [Full-text](#)

DN 148:526564

TI Compositions and processes for immersion lithography

IN Caporale, Stefan J.; Barclay, George G.; Wang, Deyan; Jia, Li

PA Rohm and Haas Electronic Materials LLC, USA

SO Eur. Pat. Appl., 26pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
PI EP 1918778	A2	20080507	EP 2007-119637	20071030
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
KR 2008039309	A	20080507	KR 2007-109779	20071030
US 20080193872	A1	20080814	US 2007-978910	20071030
JP 2008191644	A	20080821	JP 2007-281909	20071030
CN 101256355	A	20080903	CN 2007-10159692	20071030
PRAI US 2006-855715P	P	20061030		

AB New photoresist compns. are provided that are useful for immersion lithog. The preferred photoresist compns. of the invention comprise one or more materials having a water contact angle that can be changed by treatment with base and/or

one or more materials that comprise fluorinated photoacid-labile groups and/or one or more materials that comprise acidic groups spaced from polymer backbone. Particularly preferred photoresists of the invention can exhibit reduced leaching of resist materials into an immersion fluid contacting the resist layer during immersion lithog. processing.

IT 913972-94-8 1022927-75-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(photoresist compns. and processes for immersion lithog.)

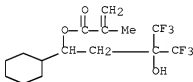
RN 913972-94-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

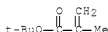
CMF C15 H20 F6 O3



CM 2

CRN 585-07-9

CMF C8 H14 O2



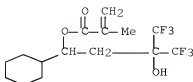
RN 1022927-75-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

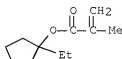
CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1

CMF C11 H18 O2



L48 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:504547 HCAPLUS Full-text

DN 148:506633

TI Photoresist composition and immersion lithographic patterning process for semiconductor fabrication

IN Hatakeyama, Jun; Kusaki, Wataru; Harada, Yuji; Yoshihara, Takao

PA Shin-Etsu Chemical Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 63pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20080096131	A1	20080424	US 2007-976279	20071023
	JP 2008107443	A	20080508	JP 2006-288456	20061024
	KR 2008036932	A	20080429	KR 2007-106501	20071023
PRAI	JP 2006-288456	A	20061024		

AB This invention relates to a photoresist composition and immersion lithog. patterning process for semiconductor fabrication. This invention's a resist composition comprises a polymer which increases its alkali solubility under the action of an acid as a base resin, and a copolymer comprising recurring units containing a sulfonic acid amine salt and recurring units containing at least one fluorine atom as an additive. The composition is suited for immersion lithog.

IT 1018678-93-7P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(photoresist composition and immersion lithog. patterning process for semiconductor fabrication)

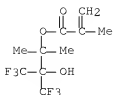
RN 1018678-93-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-10-8

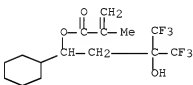
CMF C10 H12 F6 O3



CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



L48 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:472814 HCAPLUS Full-text

DN 148:459591

TI Positive photoresist composition and photolithographic patterning process for semiconductor fabrication

IN Hatakeyama, Jun; Yoshihara, Takao; Harada, Yuji; Kusaki, Wataru

PA Shin-Etsu Chemical Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 49pp.

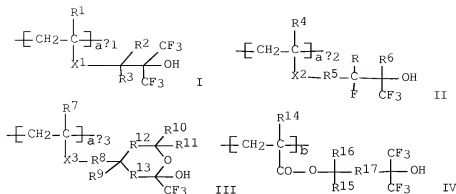
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 20080090172	A1	20080417	US 2007-872952	20071016
	JP 2008122932	A	20080529	JP 2007-259333	20071003
	KR 2008034789	A	20080422	KR 2007-103855	20071016
PRAI	JP 2006-282203	A	20061017		
GI					



AB This invention relates to a pos. photoresist composition and photolithog. patterning process for semiconductor fabrication. A resist composition comprises a polymer comprising recurring units having formulas I, II, III and IV wherein:  $R^1$ ,  $R^4$ ,  $R^7$ , and  $R^{14}$  are H or Me,  $R^2$ ,  $R^3$ ,  $R^{15}$ , and  $R^{16}$  are H, alkyl or fluoroalkyl,  $R$  is F or H,  $R^5$  is alkylene,  $R^6$  is fluorinated alkyl,  $R^8$  is a single bond or alkylene,  $R^{10}$  and  $R^{11}$  are H, F, Me or trifluoromethyl,  $R^{12}$  and  $R^{13}$  are a single bond,  $-O-$  or  $-CR^{18}R^{19}-$ ,  $R^9$ ,  $R^{18}$ , and  $R^{19}$  are H, F, Me or trifluoromethyl,  $R^{17}$  is alkylene,  $X^1$ ,  $X^2$  and  $X^3$  are  $-C(O)-O-$ ,  $-O-$ , or  $-C(O)-R^{20}-C(O)-O-$  wherein  $R^{20}$  is alkylene,  $0 \leq (a-1) < 1$ ,  $0 \leq (a-2) < 1$ ,  $0 \leq (a-3) < 1$ ,  $0 < (a-1) + (a-2) + (a-3) < 1$ ,  $0 < b < 1$ , and  $0 < (a-1) + (a-2) + (a-3) + b \leq 1$ .

IT 1018678-93-7 1018997-66-4 1018997-70-0  
1018997-74-4 1018997-78-8 1018997-82-4  
1018997-87-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(pos. photoresist composition and photolithog. patterning process for semiconductor fabrication)

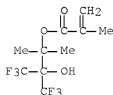
RN 1018678-93-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-10-8

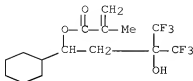
CMF C10 H12 F6 O3



CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



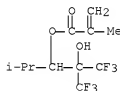
RN 1018997-66-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1-(1-methylethyl)-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-27-7

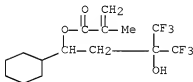
CMF C11 H14 F6 O3



CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



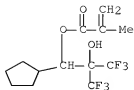
RN 1018997-70-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-cyclopentyl-3,3,3-trifluoro-2-hydroxy-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-30-2

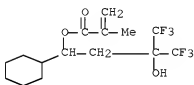
CMF C13 H16 F6 O3



CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



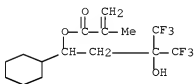
RN 1018997-74-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3-(difluoromethyl)-2,2,4,4,4-pentafluoro-3-hydroxy-1-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

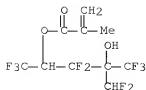
CMF C15 H20 F6 O3



CM 2

CRN 852299-70-8

CMF C10 H8 F10 O3



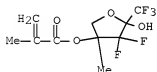
RN 1018997-78-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 4,4-difluorotetrahydro-5-hydroxy-3-methyl-5-(trifluoromethyl)-3-furanyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 872831-57-7

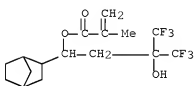
CMF C10 H11 F5 O4



CM 2

CRN 863322-85-4

CMF C16 H20 F6 O3



RN 1018997-82-4 HCAPLUS

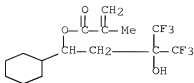
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,5,5-tetrafluorotetrahydro-2-hydroxy-6-methyl-2,6-bis(trifluoromethyl)-2H-pyran-4-yl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3

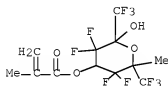




CM 2

CRN 885121-70-0

CMF C12 H10 F10 O4



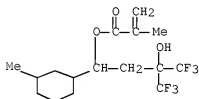
RN 1018997-87-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl ester, polymer with 4,4,4-trifluoro-3-hydroxy-1-(3-methylcyclohexyl)-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 1018997-86-8

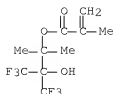
CMF C16 H22 F6 O3



CM 2

CRN 944480-10-8

CMF C10 H12 F6 O3



L48 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:447386 HCAPLUS [Full-text](#)

DN 148:459639

TI Polymer, resist protective coating material, and patterning process

IN Harada, Yuji; Hatakeyama, Jun; Hasegawa, Koji

PA Shin-Etsu Chemical Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 38pp.

CODEN: USXXCO

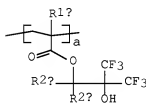
DT Patent

LA English

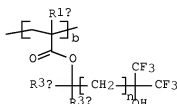
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	US 20080085466	A1	20080410	US 2007-905727	20071003
	JP 2008111089	A	20080515	JP 2007-97971	20070404
	KR 2008031637	A	20080410	KR 2007-99246	20071002
PRAI	JP 2006-272631	A	20061004		
	JP 2007-97971	A	20070404		

GI



I



II

AB A resist protective coating material comprises a polymer comprising repeat units I, II (R1a and R1b are H, F or alkyl or fluoroalkyl; R2a, R2b, R3a and R3b are H or alkyl, or R2a and R2b, and R3a and R3b may bond together to form a ring, 0<a<1, 0<b<1, a+b=1, and n=1 to 4) and having a Mw of 1,000-500,000. The protective coating material is improved in water repellency and water slip. In the ArF immersion lithog., it is effective in preventing water penetration and leaching of additives from the resist.

IT 1018678-93-7P 1018678-94-8P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymer, resist protective coating material, and patterning process)

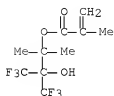
RN 1018678-93-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-10-8

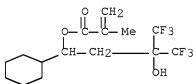
CMF C10 H12 F6 O3



CM 2

CRN 913972-93-7

CMF C15 H20 F6 O3



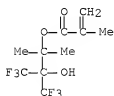
RN 1018678-94-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2,2,3,3,4,4,5,5-octafluoropentyl 2-methyl-2-propenoate and 3,3,3-trifluoro-2-hydroxy-1,1-dimethyl-2-(trifluoromethyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 944480-10-8

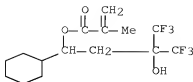
CMF C10 H12 F6 O3



CM 2

CRN 913972-93-7

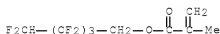
CMF C15 H20 F6 O3



CM 3

CRN 355-93-1

CMF C9 H8 F8 O2



L48 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:1243379 HCAPLUS [Full-text](#)

DN 147:477565

TI Self-topcoating photoresist for immersion lithography

IN Allen, Robert David; Brock, Phillip Joe; Larson, Carl E.; Sanders, Daniel Paul; Sooriyakumaran, Ratnam; Sundberg, Linda Karin; Truong, Hoa D.; Wallraff, Gregory Michael

PA International Business Machines Corporation, USA

SO U.S. Pat. Appl. Publ., 43pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070254235	A1	20071101	US 2006-380731	20060428
	US 20080193879	A1	20080814	US 2008-23108	20080131
PRAI	US 2006-380731	A2	20060428		
	US 2006-380744	A2	20060428		
	US 2006-380782	A2	20060428		
	US 2007-865115	B2	20071001		

AB This invention refers to photoresist compns. that can be used in immersion lithog. without the use of an addnl. topcoat. The resist compns. comprise a photoresist polymer, at least one photoacid generator, a solvent; and a self-topcoating anti-leaching resist additive. A method of forming a patterned material layer on a substrate using the resist composition is also disclosed. The above photoresist composition is used for semiconductor fabrication.

IT 863322-89-8P 346843-83-6P 952584-77-5P  
 952584-78-0P 952584-79-1P 952584-80-4P  
 952584-81-5P 952584-82-6P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (topcoat for photoresist)

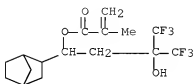
RN 863322-89-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 863322-85-4

CMF C16 H20 F6 O3



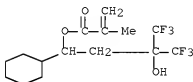
RN 946843-89-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3



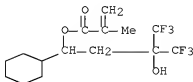
RN 952584-77-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3,5-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]cyclohexyl ester, polymer with 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

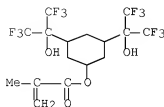
CMF C15 H20 F6 O3



CM 2

CRN 781637-36-3

CMF C16 H16 F12 O4



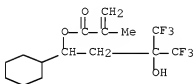
RN 952584-78-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 4,4,4-trifluoro-3-hydroxy-1-methyl-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

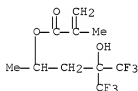
CMF C15 H20 F6 O3



CM 2

CRN 630414-85-6

CMF C10 H12 F6 O3



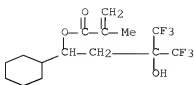
RN 952584-79-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-[[[(trifluoromethyl)sulfonyl]amino]ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

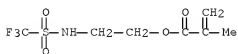
CMF C15 H20 F6 O3



CM 2

CRN 314756-98-4

CMF C7 H10 F3 N O4 S



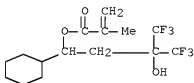
RN 952584-80-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3



CM 2

CRN 79-41-4

CMF C4 H6 O2



RN 952584-81-5 HCAPLUS

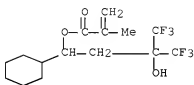
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl

2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

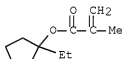
CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1

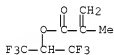
CMF C11 H18 O2



CM 3

CRN 3063-94-3

CMF C7 H6 F6 O2



RN 952584-82-6 HCAPLUS

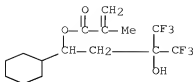
CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate and 2,2,2-trifluoro-1-(trifluoromethyl)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3

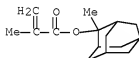




CM 2

CRN 177080-67-0

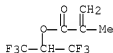
CMF C15 H22 O2



CM 3

CRN 3063-94-3

CMF C7 H6 F6 O2



L48 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:968110 HCAPLUS [Full-text](#)

DN 147:374517

TI Chemically amplified positive photoresist composition

IN Ando, Nobuo; Fuji, Yusuke; Takemoto, Kazuki

PA Sumimoto Chemical Co., Ltd., Japan

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 101pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 101021683	A	20070822	CN 2007-10079265	20070213
	KR 2007082525	A	20070821	KR 2007-14551	20070212
	US 20070218401	A1	20070920	US 2007-705138	20070212
	JP 2007249192	A	20070927	JP 2007-34384	20070215
FRAI	JP 2006-37624	A	20060215		

AB The title composition comprises F-free resin A which has unit (a1) labile to acid, and hydroxyl-containing unit (a3) and/or lactone-containing unit (a4); resin B which has F-containing unit (b2), and at least one of unit (b2) labile

to acid, hydroxyl-containing unit (b3), and lactone-containing unit (b4); and acid generator. The composition can be used in immersion lithog. process of semiconductor.

IT 949158-55-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (chemical amplified pos. photoresist composition)

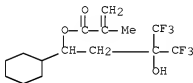
RN 949158-55-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-ethyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate and 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

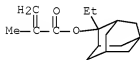
CMF C15 H20 F6 O3



CM 2

CRN 209982-56-9

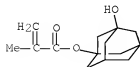
CMF C16 H24 O2



CM 3

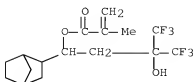
CRN 115372-36-6

CMF C14 H20 O3



AN 2007:933129 HCAPLUS Full-text  
 DN 147:311271  
 TI Resist composition for immersion lithography and method for formation of resist pattern  
 IN Irie, Makiko; Iwai, Takeshi  
 PA Tokyo Ohka Kogyo Co., Ltd., Japan  
 SO PCT Int. Appl., 90pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007094192	A1	20070823	WO 2007-JP51945	20070205
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	JP 2007249152	A	20070927	JP 2006-122330	20060426
	KR 2008085235	A	20080923	KR 2008-720775	20080825
PRAI	JP 2006-41116	A	20060217		
	JP 2006-122330	A	20060426		
	WO 2007-JP51945	W	20070205		
AB	The resist composition comprises a resin component (A) whose alkali solubility can vary by the action of an acid; and an acid generator component (B) which can generate an acid when exposed to light. The resin component (A) contains a fluorine atom and comprises a resin (A1) and a resin (A2), wherein the resin (A1) has no acid-dissociating group and the resin (A2) has a constituent unit derived from acrylic acid and contains no fluorine atom. The patterns obtained from the resist composition show improved line width roughness (LWR).				
IT	863322-89-8 946343-89-6 RL: TEM (Technical or engineered material use); USES (Uses) (resist comps. for immersion lithog. for forming patterns with improved line width roughness)				
RN	863322-89-8 HCAPLUS				
CN	2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)				
CM	1				
CRN	863322-85-4				
CMF	C16 H20 F6 O3				

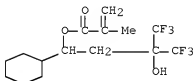


RN 946843-89-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, homopolymer (CA INDEX NAME)

CM 1

CRN 913972-93-7

CMF C15 H20 F6 O3



# RETABLE

Referenced Author (RAU)	Year	VOL	PG	Referenced Work (RPY)   (RVL)   (RPG)   (RWK)	Referenced File
Central Glass Co Ltd	2005			JP 2005232095 A	HCAPLUS
Central Glass Co Ltd	2005			WO 200580306 A1	
Central Glass Co Ltd	2005			KR 2006117361 A	
Fuji Photo Film Co Ltd	2006			EP 1621927 A2	HCAPLUS
Fuji Photo Film Co Ltd	2006			JP 200648029 A	
Fuji Photo Film Co Ltd	2006			KR 200649917 A	
Fuji Photo Film Co Ltd	2006			US 20068736 A1	
Tokyo Ohka Kogyo Co Ltd	2005			JP 2005284238 A	HCAPLUS

L48 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:671905 HCAPLUS [Full-text](#)

DN 147:82701

TI Resist composition for liquid immersion exposure and method for forming resist pattern

IN Irie, Makiko

PA Tokyo Ohka Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 87pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007069548	A1	20070621	WO 2006-JP324573	20061208
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,				

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

JP	2007187887	A	20070726	JP	2006-6013	20060113
KR	2008068140	A	20080722	KR	2008-714773	20080618
PRAI	JP 2005-357493	A	20051212			
	JP 2006-6013	A	20060113			
WO	2006-JP324573	W	20061208			

AB The resist composition, having excellent immersion medium resistance and lithog. characteristics at the same time, contains a resin component (A) whose alkali solubility is varied by the action of an acid, and an acid generator component (B) which generates an acid when exposed to light. The resin component (A) contains 0.1-50% of a resin containing a fluorine atom, and another resin having a constitutional unit derived from an acrylic acid and containing no fluorine atom.

IT 963322-88-7 942951-40-3

RL: TEM (Technical or engineered material use); USES (Uses)  
(resist compns. with good immersion medium resistance and lithog.  
characteristics for liquid immersion exposure)

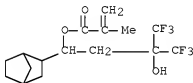
RN 863322-88-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 863322-85-4

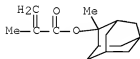
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CM 2

CRN 177080-67-0

CMF C15 H22 O2



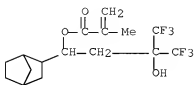
RN 942051-40-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-bicyclo[2.2.1]hept-2-yl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-methyl-2-propenoate, 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 863322-85-4

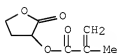
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CM 2

CRN 195000-66-9

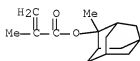
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CM 3

CRN 177080-67-0

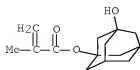
CMF C15 H22 O2



CM 4

CRN 115372-36-6

CMF C14 H20 O3



RETABLE

Referenced Author (RAU)	Year	VOL	PG	Referenced Work (RWK)	Referenced File
	(RPY)	(RVL)	(RPG)		
Fuji Photo Film Co Ltd	2005			EP 1505439 A2	HCAPLUS
Fuji Photo Film Co Ltd	2005			US 20050019690 A1	HCAPLUS
Fuji Photo Film Co Ltd	2005			JP 2005055890 A	HCAPLUS
Fuji Photo Film Co Ltd	2006			EP 1621927 A1	HCAPLUS
Fuji Photo Film Co Ltd	2006			US 20060008736 A1	HCAPLUS
Fuji Photo Film Co Ltd	2006			JP 2006048029 A	HCAPLUS
Shin-Etsu Chemical Co L	2005			US 20050227173 A1	HCAPLUS
Shin-Etsu Chemical Co L	2005			JP 2005320516 A	HCAPLUS
Shin-Etsu Chemical Co L	2006			JP 2006178317 A	HCAPLUS

L48 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:1150392 HCAPLUS Full-text

DN 145:480438

TI Compositions and processes for immersion lithography

IN Wang, Deyan

PA Rohm and Haas Electronic Materials LLC, USA

SO U.S. Pat. Appl. Publ., 13pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060246373	A1	20061102	US 2006-414872	20060501
	EP 1720072	A1	20061108	EP 2006-252260	20060427
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2006309245	A	20061109	JP 2006-124957	20060428
	KR 2006114293	A	20061106	KR 2006-39337	20060501
	CN 1881085	A	20061220	CN 2006-10079812	20060508
PRAI	US 2005-676762P	P	20050501		

AB New photoresist compns. are provided that are useful for immersion lithog. The preferred photoresist compns. of the invention comprise one or more materials that can be substantially non-mixable with a resin component of the resist. Further preferred photoresist compns. of the invention comprise (1) Si substitution; (2) fluorine substitution; (3) hyperbranched polymers; and/or (4) polymeric particles. Particularly preferred photoresists of the invention can exhibit reduced leaching of resist materials into an immersion fluid contacting the resist layer during immersion lithog. processing.

IT 913972-94-8P 913972-96-8P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(photoresist compns. and processes for immersion lithog.)

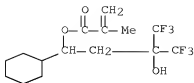
RN 913972-94-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1,1-dimethylethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 913972-93-7

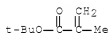
CMF C15 H20 F6 O3



CM 2

CRN 585-07-9

CMF C8 H14 O2



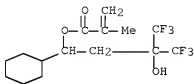
RN 913972-96-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-cyclohexyl-4,4,4-trifluoro-3-hydroxy-3-(trifluoromethyl)butyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 913972-93-7

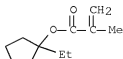
CMF C15 H20 F6 O3



CM 2

CRN 266308-58-1

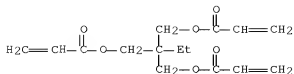
CMF C11 H18 O2



CM 3



CRN 15625-89-5  
CMF C15 H20 O6



=> d his

(FILE 'HOME' ENTERED AT 06:28:45 ON 02 OCT 2008)  
DEL HIS

FILE 'HCAPLUS' ENTERED AT 06:31:48 ON 02 OCT 2008

L1		1 S US20080003517/PN OR (US2007-589807# OR WO2005-JP2400 OR JP2005-160000) E KOMORIYA/AU
L2	45	S E9,E10 E HARUHIKO/AU E SUMIDA/AU E SUMIDA S/AU
L3	86	S E3,E24,E25,E27 E SUMIDA NAME/AU
L4	6	S E4 E SHINICHI/AU
L5	6	S E3 E SHIN ICHI/AU E OOTANI/AU E OOTANI M/AU
L6	24	S E4,E27 E MICHITAKA/AU
L7	1	S E8 E KOMATA/AU
L8	108	S E86,E105,E116 E TAKEO/AU
L9	1	S E3 E TAKEO K/AU
L10	27	S E3
L11	5	S E68 E MAEDA/AU
L12	4	S E3 E MAEDA K/AU
L13	1255	S E3-E5,E66 E MAEDA NAME/AU
L14	75	S E4 E KAZUHIKO/AU
L15	1	S E3 E CENTRAL GLASS/CO
L16	3444	S E42-E53/CO,PA,CS E E43+ALL
L17	3516	S E2+RT OR E2-E6/PA,CS
L18	1	S L1 AND L2-L17 SEL RN

FILE 'REGISTRY' ENTERED AT 06:37:29 ON 02 OCT 2008

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L19      17 S E1-E17
L20      7 S L19 AND PMS/CI
L21      STR
L22      35 S L21
L23      SCR 1838
L24      23 S L21 AND L23
L25      505 S L21 AND L23 FUL
          SAV TEMP L25 EOFF589A/A
          STR
L26
L27      11 S L26 SAM SUB=L25
L28      153 S L26 FUL SUB=L25
          SAV TEMP L28 EOFF589B/A
L29      27 S L28 NOT PMS/CI
L30      4 S L29 AND (C15H20F6O3 OR C14H18F6O3 OR C16H20F6O3 OR C16H22F6O3
L31      126 S L28 NOT L29
L32      6 S L31 AND 1/NC
L33      3 S L32 AND (C15H20F6O3 OR C14H18F6O3 OR C16H20F6O3)
L34      115 S L31 NOT L32,L20
L35      31 S L34 AND (C15H18F6O3 OR C16H20F6O3 OR C15H20F6O3)
L36      8 S L35 AND (C2H4O3S OR C8H8O3S OR C3H6O3S OR C12H18O2 OR C10H7F1
L37      7 S L36 NOT "(C16H20F6O3.C15H22O2.C14H20O3.C8H10O4)X"/MF
L38      2 S L35 AND "(C15H18F6O3.C10H12F6O3)X"/MF
L39      22 S L35 NOT L37,L38
L40      84 S L34 NOT L35
L41      1 S L40 AND C16H22F6O3
L42      36 S L20,L30,L33,L39,L41
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FILE 'HCAPLUS' ENTERED AT 07:03:06 ON 02 OCT 2008

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L43      15 S L42
L44      2 S L43 AND L1-L18
L45      0 S L43 AND PY<=2005 NOT P/DT
L46      2 S L43 AND (PD<=20050217 OR PRD<=20050217 OR AD<=20050217) AND P
L47      2 S L44,L46
L48      13 S L43 NOT L47
          SEL RN L47

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FILE 'REGISTRY' ENTERED AT 07:04:36 ON 02 OCT 2008

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L49      28 S E18-E45
L50      5 S L49 AND L25 NOT L42

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FILE 'HCAPLUS' ENTERED AT 07:05:28 ON 02 OCT 2008

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L51      TRA L48 1- RN :      163 TERMS

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FILE 'REGISTRY' ENTERED AT 07:05:29 ON 02 OCT 2008

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L52      163 SEA L51
L53      4 S L52 AND L25 NOT L42,L50

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FILE 'REGISTRY' ENTERED AT 07:05:59 ON 02 OCT 2008

FILE 'HCAPLUS' ENTERED AT 07:06:23 ON 02 OCT 2008

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